



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Art. 1101  
Examiner :  
Serial No. : 09/508,042  
Filed : March 3, 2000  
PCT No. : PCT/EP98/05793  
PCT Filed : September 11, 1998  
Inventors : Klaus Pawelzik  
: Klaus-Robert Müller  
: Jens Kohlmorgen  
Title : METHOD FOR DETECTING  
: TIME-DEPENDENT MODES  
: OF DYNAMIC SYSTEMS

36th Floor  
1600 Market Street  
Philadelphia, PA 19103

Docket: 1035-00

Dated: May 10, 2000

INFORMATION DISCLOSURE STATEMENT

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**Box PCT**  
Assistant Commissioner for Patents  
Washington, DC 20231

**Technology Center 2100**

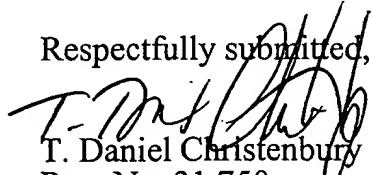
Sir:

We submit herewith the usual Form PTO-1449 together with copies of publications listed therein. They are submitted to comply with the Applicants' duty of disclosure under 37 C.F.R. §1.56 and are believed related to this application.

We are submitting this in the spirit of voluntary disclosure and look forward with interest to the Examiner's action at an early date on the merits of the case.

It is accordingly requested that the Information Disclosure Statement be officially entered in the file of this case and that appropriate notification be made that it was considered in the prosecution of the case.

Respectfully submitted,

  
T. Daniel Christenbury  
Reg. No. 31,750  
Attorney for Applicants

TDC:lh  
(215) 563-1810

Form PTO-1449

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Klaus Pawelzik et al.

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## U.S. PATENT DOCUMENTS

EXAMINER INITIAL*		DOCUMENT NUMBER							DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	AA	5	3	0	7	4	4	4	04/26/94	Eiichi Tsuboka			
	AB	5	4	1	2	1	6	3	05/02/95	Shintaro Tsuji			
	AC	5	6	5	9	6	6	7	08/19/97	Kevin L. Burscher et al.			
	AD												
	AL												
	AF												
	AG												
	AH												
	AI												
	AJ												
	AK												

## FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
							YES	NO
	AL	WO 90/09644	08/23/90	International			x	
	AM	EP 0 510 632 A2	10/28/92	Europe			x	
	AN	WO 94/20887	09/15/94	International			x	
	AO	WO 95/18420	07/06/95	International			x	
	AP	DE 195 30 646 C1	10/17/96	Germany			Abstract only	

## OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)

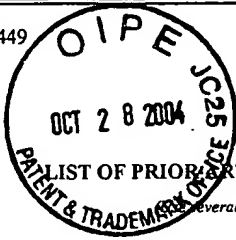
AR	John Hertz et al., <u>INTRODUCTION TO THE THEORY OF NEURAL COMPUTATION</u> , Addison-Wesley Publishing Company, 1991, Chapter 9 "Unsupervised Competitive Learning"
	G. Pfurtscheller et al., <u>SLEEP CLASSIFICATION IN INFANTS BASED ON ARTIFICIAL NEURAL NETWORKS</u> , Biomedizinische Technik, Band 37, Heft 6/1992, Pages 122 - 130
AS	Andreas Draeger et al., <u>PRÄDIKTIVE REGELUNG VERFAHRENSTECHNISCHER ANLAGEN MIT NEURONALEN NETZEN</u> , Automatisierungstechnische Praxis 37, 1995, 4, Pages 55 - 61 w/English language summary
	Dietmar Wezzlar, <u>NEURONALE NETZE IN DER MEßTECHNIK</u> , Technisches Messen 62, 1995, 3 w/English language summary
AT	Achim Bothe, <u>NEURONALE KLASSIFIKATOREN IN DER AKUSTISCHEN MUSTERERKENNUNG</u> , Technisches Messen 62, 1995, 3, Pages 88 - 94 w/English language summary
	Stephan Ester, <u>HERZSCHALLANALYSE MIT UNTERSTÜTZUNG ADAPTIVER FILTER UND NEURONALER NETZE</u> , Technisches Messen 62, 1995, 3, Pages 107 - 112 w/English language summary

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\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

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							YES	NO
	AL	DE 195 30 647 C1	01/23/97	Germany			Abstract only	
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	AN	DE 195 37 010 A1	04/10/97	Germany			Abstract only	
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## OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)

AR	Dietmar Gerhardt et al., <u>ATEMMUSTER- UND SCHLAFSTADIENERKENNUNG MIT NEURONALEN NETZEN BEI SÄUGLINGEN</u> , Technisches Messen 62, 1995, 3, Pages 113 - 116 w/English language summary
	Christel Wisotzki et al., <u>LERNFÄHIGE KLASSIFIKATION VON ZEITREIHEN</u> , Automatisierungstechnik 43, 1995, 2, Pages 70 - 76 w/English language summary
AS	Stefan Gehlen et al., <u>EINSATZ NEURONALER NETZE ZUR KONTROLLE KOMPLEXER INDUSTRIELLER PROZESSE</u> , Automatisierungstechnik 43, 1995, 2, Pages 85 - 91 w/English language summary
	Harald Peters, <u>ANWENDUNG KÜNSTLICHER NEURONALER NETZE IN ÜBERWACHUNGSSYSTEMEN</u> , Automatisierungstechnische Praxis 38, 1996, 11, Pages 37 - 38, 40 - 42, 44 - 46, 48 w/English language summary
AT	Thomas Martinetz et al., <u>NEURONALE NETZE ZUR STEUERUNG VON WALZSTRÄßEN</u> , Automatisierungstechnische Praxis 38, 1996, 10, Pages 28, 30 - 32, 34 - 36, 41 - 42 w/English language summary
	Klaus Pawelzik et al., <u>ANNEALED COMPETITION OF EXPERTS FOR A SEGMENTATION AND CLASSIFICATION OF SWITCHING DYNAMICS</u> , Neural Computation 8, Pages 340 - 356, 1996

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AR	D. Popivanov et al., <u>DETECTION OF SUCCESSIVE CHANGES IN DYNAMICS OF EEG TIME SERIES: LINEAR AND NONLINEAR APPROACH</u> , 18 <sup>th</sup> Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 1996, Pages 1590 - 1591
	J. Pardey et al., <u>A REVIEW OF PARAMETRIC MODELLING TECHNIQUES FOR EEG ANALYSIS</u> , Med. Eng. Phys., Vol. 18, No. 1, Pages 2 - 11, 1996
AS	J. Kohlmorgen, et al., <u>ANALYSIS OF WAKE/SLEEP EEG WITH COMPETING EXPERTS</u> , Pages 1077 - 1082
	N. H. Packard et al., <u>GEOMETRY FROM A TIME SERIES</u> , Physical Review Letters, Vol. 45, No. 9, September 1980, Pages 712 - 716
AT	Lawrence R. Rabiner, Fellow, IEEE, <u>A TUTORIAL ON HIDDEN MARKOV MODELS AND SELECTED APPLICATIONS IN SPEECH RECOGNITION</u> , Readings in Speech Recognition, Eds. Alex Waibel et al., San Mateo, Morgan Kaufmann, 1990, Pages 267 - 296

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